

1 **ABSTRACT OF THE DISCLOSURE**

2 A silent and reduced vibration chainwheel includes a disk, multiple teeth
3 and an energy absorber. The disk has an outer edge, two opposite sides and at
4 least one recess. The teeth formed radially at and extend out from the outer edge
5 of the disk. The energy absorber is made of resilient material and is mounted in
6 the at least one recess at the outer edge of the disk to absorb the impact of a chain
7 driven by or driving the chainwheel and reduce the noise and vibrations caused
8 by the impact of the chain and the chainwheel. The energy absorber can be
9 resilient annular rings, strips, rods or a combination of them. Therefore, the
10 chainwheel is silent and fewer vibrations are produced so a person who uses a
11 machine that has the chainwheel will feel comfortable.